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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,009	04/08/2004	Hyung Sun Kim	1740-000093/US	7534
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HARNES, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER CHIO, TAT CHI	
			ART UNIT 2621	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/820,009	Applicant(s) KIM ET AL.	
	Examiner TAT CHI CHIO	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-15,17-20,22-24,26-28 and 30-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-15,17-20,22-24,26-28 and 30-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/30/2008, 5/1/2008, 7/29/2008, and 9/10/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/29/2008 has been entered.

Response to Arguments

2. Applicant's arguments filed 7/29/2008 regarding to the rejection under 35 USC 101 have been fully considered but they are not persuasive.

Applicant argues that amended claims 1-6 and 8-11 contain functional descriptive material.

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In response, the examiner respectfully disagrees. The claims do not contain functional descriptive materials. Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture, or composition of matter and should be rejected under 35 U.S.C. 101. Certain types of descriptive material, such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture, or composition of matter. In this case, the claims contain mere arrangements or compilation of data (data area). Therefore, the claims are rejected under 35 USC 101.

3. Applicant's arguments with respect to claims 1-6, 8-15, 17-20, 22-28, and 30-37 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 and 8-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture, or composition of matter and should be rejected under 35 U.S.C. 101. Certain types of descriptive material, such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture, or composition of matter. USPTO personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping or sequence of musical notes read from memory and thereafter causes another defined series of notes to be played, requires a

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functional interrelationship among that data and the computing processes performed when utilizing that data. As such, a claim to that computer is statutory subject matter because it implements a statutory process.

Claims 1-6 and 8-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 5 and 10 recite a computer-readable medium which does not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 33 recites the limitation "recording medium". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1, 5, 6, 8, 9, 13, 21, 24, and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bae et al. (US 2003/0188312 A1) in view of Kato et al. (US 7,236,687 B2).

Consider claim 1, Bae et al. teach a computer-readable medium storing an executable data structure for managing reproduction of a text subtitle data by a reproducing apparatus, comprising: a data area storing a text subtitle stream including text subtitle data and at least one of global style information and local style information (Fig. 6), the global style information providing at least one of composition information and rendering information (Fig. 6), and the local style information providing at least one font information for at least a portion of the text subtitle data for managing reproduction by the reproducing apparatus (Fig. 6), but do not explicitly teach the font information includes a length indicator indicating the number of characters in the associated portion of the text subtitle data.

Kato et al. teach the font information includes a length indicator indicating the number of characters in the associated portion of the text subtitle data (col. 16, lines 36-43 and col. 19, lines 35-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a length indicator indicating the number of characters to count the number of characters.

Consider claim 5, Bae et al. teach the computer-readable medium, wherein the rendering information includes a display effect of the text subtitle data ("font color" of Fig. 6).

Consider claim 6, Bae et al. teach the computer-readable medium, wherein the font information includes at least one of a font, font size and a font style (Fig. 6).

Consider claim 8, Bae et al. teach the computer-readable medium, wherein the text subtitle data includes at least one text string (it is well-known in the art that subtitle data includes at least one text string).

Consider claim 9, Bae et al. teach the computer-readable medium, wherein the local style information is stored in association with the portion of the text subtitle data for which the local style information provides the font information (Fig. 6).

Consider claim 13, Bae et al. teach method of reproducing a data structure for managing reproduction of a text subtitle data, comprising: reproducing a text subtitle stream from the recording medium (Fig. 5), the text subtitle stream including text subtitle data and local style information (Fig. 6), the local style information providing at least one font information for at least a portion of the text subtitle data following sequentially after local style information (Fig. 6).

Consider claim 24, Bae et al. teach the method, wherein the local style information is stored in association with the portion of the text subtitle data for which the local style information provides the font information (Fig. 6).

Consider claim 33, Bae et al. teach the recording medium, wherein the local style information provides font information for a portion of the text subtitle data recorded sequentially after the local style information (Fig. 6).

Consider claim 34, Bae et al. teach the method, wherein the local style information provides font information for a portion of the text subtitle data recorded sequentially after the local style information (Fig. 6).

Consider claim 35, Bae et al. teach the method, wherein the local style information provides font information for a portion of the text subtitle data recorded sequentially after the local style information (Fig. 6).

Consider claim 36, Bae et al. teach the apparatus, wherein the controller is configured to control the pickup to record the text subtitle stream which includes the local style information providing font information for a portion of the text subtitle data recorded sequentially after the local style information (Fig. 6).

Consider claim 37, Bae et al. teach the apparatus, wherein the controller is configured to control the pickup to record the text subtitle stream which includes the local style information providing font information for a portion of the text subtitle data recorded sequentially after the local style information (Fig. 6).

1. Claims 2-4, 12, 14, 15, 17-20, 22, 23, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bae et al. (US 2003/0188312 A1) in view of Kato et al. (US 7,236,687 B2) as applied to claim 1 above, and further in view of Tsukagoshi et al. (5,848,217).

Consider claim 2, Bae et al. and Kato et al. teach all the limitations in claims 1 and 16 but fail to teach the computer-readable medium, wherein the composition information includes position information for positioning a text subtitle represented by the text subtitle data on a display.

Tsukagoshi et al. teach the computer-readable medium, wherein the composition information includes position information for positioning a text subtitle represented by the text subtitle data on a display (col. 5, lines 56-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the composition information in the subtitle data in order to give a more accurate description of the subtitle data.

Consider claim 3, Bae et al. teach the computer-readable medium, wherein the rendering information includes a display effect of the text subtitle data ("font color" of Fig. 6).

Consider claim 4, Tsukagoshi et al. further teach the computer-readable medium, wherein the global style information includes the composition information and the rendering information (col. 5, lines 56-67).

Consider claim 12, Bae et al., Kato et al., and Tsukagoshi teach a method of recording a data structure for managing reproduction of a text subtitle data, comprising: recording a text subtitle stream on the recording medium (col. 13, lines 45-55 of Tsukagoshi et al.), the text subtitle stream including text subtitle data and at least one of global style information and local style information (Fig. 6 of Bae et al.), the global style information providing at least one of composition information and rendering information,

and the local style information providing at least one font information for at least a portion of the text subtitle data (Fig. 6 of Bae et al.), wherein the font information includes a length indicator indicating the number of characters in the associated portion of the text subtitle data (col. 16, lines 36-43 and col. 19, lines 35-42 of Kato et al.).

Consider claim 14, Bae et al., Kato et al., and Tsukagoshi et al. teach an apparatus for recording a data structure for managing reproduction of a text subtitle data, comprising: a pickup configured to record data on the recording medium (Fig. 9 of Tsukagoshi et al.); a controller configured to control the pickup to record a text subtitle stream on the recording medium (14 of Fig. 1 of Tsukagoshi et al.), the text subtitle stream including text subtitle data and at least one of global style information and local style information (Fig. 6 of Bae et al.), the global style information providing at least one of composition information and rendering information (Fig. 6 of Bae et al.), and the local style information providing at least one font information for at least a portion of the text subtitle data (Fig. 6 of Bae et al.), wherein the font information includes a length indicator indicating the number of characters in the associated portion of the text subtitle data (col. 16, lines 36-43 and col. 19, lines 35-42 of Kato et al.).

Consider claim 15, Bae et al., Kato et al., and Tsukagoshi et al. teach an apparatus for reproducing a data structure for managing reproduction of a text subtitle data, comprising: a pickup configured to reproduce data on the recording medium (Fig. 9 of Tsukagoshi et al.); a controller configured to control the pickup to reproduce a text subtitle stream on the recording medium (14 of Fig. 1 of Tsukagoshi et al.), the text subtitle stream including text subtitle data and at least one of global style information

and local style information (Fig. 6 of Bae et al.), the global style information providing at least one of composition information and rendering information (Fig. 6 of Bae et al.), and the local style information providing at least one font information for at least a portion of the text subtitle data (Fig. 6 of Bae et al.), wherein the font information includes a length indicator indicating the number of characters in the associated portion of the text subtitle data (col. 16, lines 36-43 and col. 19, lines 35-42 of Kato et al.).

Consider claim 17, Bae et al. teach the method, wherein the text subtitle stream further includes global style information providing at least one of composition information and rendering information (Fig. 6).

Consider claim 18, Tsukagoshi et al. teach the method, wherein the composition information includes position information for positioning a text subtitle represented by the text subtitle data on a display (col. 5, lines 56-58).

Consider claim 19, Bae et al. teach the method, wherein the rendering information includes a display effect of the text subtitle data ("font color" of Fig. 6).

Consider claim 20, Bae et al. teach the method, wherein the local style information is stored in association with the portion of the text subtitle data for which the local style information provides the font information (Fig. 6).

Consider claim 22, Tsukagoshi et al. teach the method, wherein the composition information includes position information for positioning a text subtitle represented by the text subtitle data on a display (col. 5, lines 56-58).

Consider claim 23, Bae et al. teach the method, wherein the rendering information includes a display effect of the text subtitle data ("font color" of Fig. 6).

Consider claim 26, Tsukagoshi et al. teach the apparatus, wherein the controller is configured to control the pickup to record the text subtitle stream which includes the composition information including position information for positioning a text subtitle represented by the text subtitle data on a display (col. 5, lines 56-58).

Consider claim 27, Bae et al. teach the apparatus, wherein the controller is configured to control the pickup to record the text subtitle stream which includes the rendering information including a display effect of the text subtitle data (“font color” of Fig. 6).

Consider claim 28, Bae et al. teach the apparatus, wherein the controller is configured to control the pickup to record the text subtitle stream which includes the local style information being stored in association with the portion of the text subtitle data for which the local style information provides the font information (Fig. 6).

Consider claim 30, Tsukagoshi et al. teach the apparatus, wherein the controller is configured to control the pickup to reproduce the text subtitle stream which includes the composition information including position information for positioning a text subtitle represented by the text subtitle data on a display (col. 5, lines 56-58).

Consider claim 31, Bae et al. teach the apparatus, wherein the controller is configured to control the pickup to reproduce the text subtitle stream which includes the rendering information including a display effect of the text subtitle data (“font color” of Fig. 6).

Consider claim 32, Bae et al. teach the apparatus, wherein the controller is configured to control the pickup to reproduce the text subtitle stream which includes the

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local style information being stored in association with the portion of the text subtitle data for which the local style information provides the font information (Fig. 6).

2. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bae et al. (US 2003/0188312 A1) in view of Kato et al. (US 7,236,687 B2) as applied to claim 1 above, and further in view of Kashima (US 2002/0087999 A1).

Consider claim 10, Bae et al. and Kato et al. teach all the limitations in claim 1 but fail to teach the computer-readable medium, wherein the text subtitle stream is stored as at least one packetized elementary stream.

Kashima teaches the recording medium, wherein the text subtitle stream is stored as at least one packetized elementary stream (Fig. 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store the text subtitle stream as packetized elementary stream to facilitate efficient transmission using MPEG 2.

Consider claim 11, Kashima further teaches the computer-readable medium, wherein the text subtitle stream is stored as a plurality of transport packets ([0024]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAT CHI CHIO whose telephone number is (571)272-9563. The examiner can normally be reached on Monday - Thursday 9:00 AM-5:00 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571)-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. C. C./
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621